

Building Applications with HBase

Setting up HBase

Download the tarball from <http://hbase.apache.org>
We'll use standalone mode for this tutorial.

Once you have the tarball, unarchive the file in a location of your choice.

```
mkdir ~/strata
cp /my/location/hbase-0.94.1.tar.gz ~/strata
cd ~/strata
tar xvf hbase-0.94.1.tar.gz
```

After unarchiving, start HBase in standalone mode.

```
cd hbase-0.94.1
bin/start-hbase.sh
```

You can see the HBase status UI on <http://localhost:60010>

Using the shell

Start the shell using the hbase command line tool.

```
bin/hbase shell
```

The 'help' command will give you a list of shell commands. To see the help for a specific command, pass the name of the command as an argument to the help command.

Example:
`help 'create'`

Create table:
`create 'users', 'info'`

List tables:
`list`

Describe table:
`describe 'users'`

Put a row:

```
put 'users' , 'u1' , 'info:name' , 'Mr. Rogers'
```

Get a row:

```
get 'users' , 'u1'
```

Put more:

```
put 'users' , 'u1' , 'info:email' , 'mail@rogers.com'
```

```
put 'users' , 'u1' , 'info:password' , 'foobar'
```

Get a row:

```
get 'users' , 'u1'
```

Scan table:

```
scan 'users'
```

Java API

Download twitbase source from <https://github.com/hbaseinaction/twitbase>

Sample code to play with:

```
Configuration conf = HBaseConfiguration.create();
```

```
HTable users_table = new HTable(conf, "users");
```

```
for(int i=1; i<=10; i++) {  
    Put p = new Put(Bytes.toBytes("user" + i));  
    p.add(Bytes.toBytes("info"),  
        Bytes.toBytes("name") ,  
        Bytes.toBytes("User" + i + "'s name")  
    );  
    users_table.put(p);  
}
```

```
Get g = new Get(Bytes.toBytes("user1"));  
Result r = users_table.get(g);  
System.out.println("Name = " +  
    Bytes.toString(r.getValue(Bytes.toBytes("info"),  
        Bytes.toBytes("name"))));
```

```
Scan s = new Scan();  
ResultScanner rs = users_table.getScanner(s);  
for(Result scan_r : rs) {  
    System.out.println(Bytes.toString(scan_r.getValue  
        (Bytes.toBytes("info"), Bytes.toBytes("name"))));  
}
```